## Education

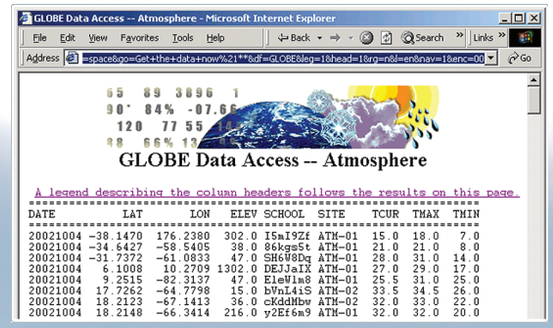
Teachers attend a GLOBE training workshop before beginning GLOBE in their classrooms. At these workshops, they get hands-on instruction on how to take the GLOBE measurements and how to report the data. All scientific protocols, learning activities, and teacher support materials in the GLOBE Teacher's Guide can be easily downloaded as pdf files on the GLOBE Web site.

The Program's highly regarded educational activities and materials include:

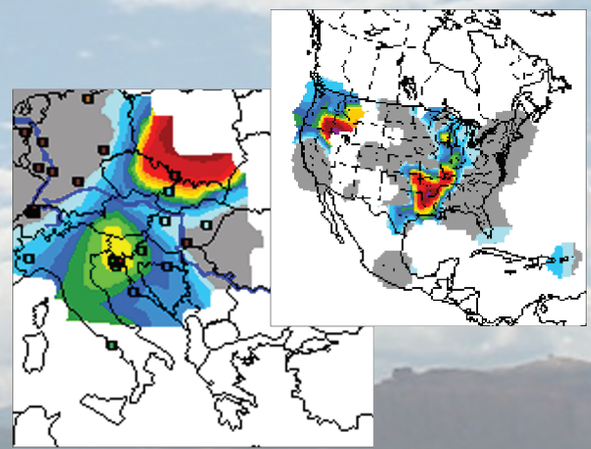
- Lesson Plans
- Classroom Implementation Ideas
- Training Support
- Evaluation Strategies

The Educators' Corner of the GLOBE website allows teachers to share ideas with one another, see how GLOBE aligns with state and national standards, study approaches on implementing GLOBE in the classroom, and more.

## GLOBE Data




The GLOBE database currently consists of over ten million environmental observations that have been collected and reported by GLOBE students via the Web or via email. GLOBE measurements provide important data that are sometimes not otherwise available, and may be necessary to help scientists validate data collected from other sources such as satellites. Once submitted, these data are publicly available on the GLOBE website, may be displayed graphically with GLOBE visualization tools, and are used in research by students and scientists.



## Science

The GLOBE Protocols cover five main Earth science investigation areas:

- Atmosphere (chemistry, weather and climate)
- Hydrology (water measurements and macroinvertebrates)
- Soils (moisture, temperature, general characteristics)
- Land Cover/Biology (mapping, biometry)
- Phenology (plant and animal responses to seasons and climate change)


Schools can focus on all of these areas or just a subset such as cloud observations and land cover measurements.

An important aspect of the program is that students are encouraged to communicate directly with the GLOBE scientists to better understand the importance and impact of their data. At Scientists' Corner on the GLOBE website, GLOBE scientists discuss with students the patterns they see in the students' data, answer commonly asked questions, and list scientific publications relevant to GLOBE.